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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,802

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Toru Yamada

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EXAMINER

SONG, MATTHEW J

ART UNIT

PAPER NUMBER

1714

NOTIFICATION DATE

DELIVERY MODE

01/24/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com
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Office Action Summary	Application No. 10/582,802	Applicant(s) YAMADA, TORU	
	Examiner MATTHEW J. SONG	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4,6,10,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4,6,10,16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 17 recites the limitation "the gas introducing gas" in line 25. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 2-4, 6, 10 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al (US 5,916,369).

Referring to claim 16, Anderson et al teaches a vapor phase growth apparatus comprising a reaction vessel that comprises a gas introducing port **232** formed on a first end side in a horizontal standard line through which a source gas for forming a film is introduced into the reaction vessel; and a gas discharge port **36** on a second end side in the horizontal direction through which the source gas is discharged out of the reaction vessel (Fig 6 and col 5, ln 1-67); a disc-formed susceptor **22** rotated about an axis in an inner space of the reaction vessel on which a substrate is disposed in a near-horizontally rotating manner (Figs 1 and 6 and col 1, ln 10-67); a

Art Unit: 1714

bank component **118** that surrounds the susceptor and that is positioned so that a top surface of the bank component aligns with a top surface of the susceptor (Figs 1, 2 and 6, col 4, ln 1-67); an upper lining component that overlaps the bank component (Fig 2 teaches a component above the bank component **118** which forms a gap); a gas introducing gap **120, 140** formed by the bank component and the upper lining component that is configured to communicate with the reaction vessel that remains constant at some (any) position, such as two adjacent points; wherein the gas introducing port opposes an outer peripheral surface of the bank component so that the source gas supplied through the port collides against the outer peripheral surface of the bank component, climbs up and flows along the substrate (Fig 2).

Referring to claim 2-3, Anderson et al teaches remaining constant at any position and gases flow horizontally along the liner.

Referring to claims 6 and 10, Anderson et al teaches an exhaust port which reads on an evacuation system, thus is capable of reducing pressure.

Referring to claims 4 and 17, Anderson et al teaches all of the limitations, as discussed above in regards to independent claim 16. As to the limitation regarding the center of an arc drawn by an inner periphery of the lower surface of the upper lining component is set on a downstream side in the direction of the flow of source gas, and the radius of the arc drawn by the inner periphery of the lower surface of the upper lining component is set larger than the radius of the arc drawn by the inner periphery of the top surface of the bank component, Anderson et al teaches circular components (Fig 3), thus the arc defined by applicant, i.e. drawn from a downstream side would inherently have a larger radius than a radius drawn from the center of the

Art Unit: 1714

susceptor, and because how much further downstream is not defined an arc from any point downstream with a larger radius would read on the claim.

Response to Arguments

5. Applicant's arguments with respect to claims 2-4, 6, 10, 16-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kools et al (US 2005/0100669) depicts a gas injector with two different radius (Fig 2A) .

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1714

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW J. SONG whose telephone number is (571)272-1468. The examiner can normally be reached on M-F 11:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Kornakov can be reached on 571-272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew J Song
Examiner
Art Unit 1714

/Matthew J Song/
Examiner, Art Unit 1714